



Zika Virus Update: July 13

COUNTY OF MORRIS

DEPARTMENT OF PLANNING AND PUBLIC WORKS

DIVISION OF MOSQUITO CONTROL

KRIS MCMORLAND, DIRECTOR

ZIKA VIRUS

- ▶ Zika is a viral infection spread primarily by the bite of an infected *Aedes aegypti*.
- ▶ *Aedes aegypti* has occasionally been found in New Jersey but in very low numbers and due to climate is unlikely to establish a permanent population.
- ▶ State and local agencies are on the lookout for this particular mosquito.
- ▶ The Asian Tiger Mosquito, *Aedes albopictus*, also has the ability to transmit the virus though it is not as efficient as the *Aedes aegypti*.

PROTECT YOUR FAMILY AND COMMUNITY: HOW ZIKA SPREADS

Most people get Zika from a mosquito bite



More members in the community become infected



More mosquitoes get infected and spread the virus



A mosquito bites a person infected with Zika virus



The mosquito becomes infected



A mosquito will often live in a single house during its lifetime



The infected mosquito bites a family member or neighbor and infects them

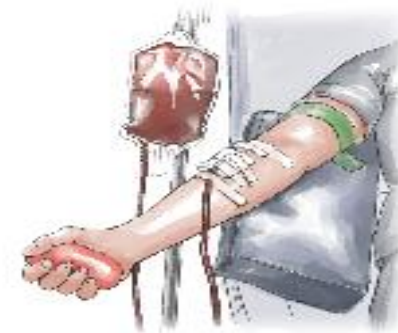
Other, less common ways, people get Zika:



During pregnancy
A pregnant woman can pass Zika virus to her fetus during pregnancy. Zika causes microcephaly, a severe birth defect that is a sign of incomplete brain development



Through sex
Zika virus can be sexually transmitted by a man to his partners



Through blood transfusion
There is a strong possibility that Zika virus can be spread through blood transfusions



Aedes aegypti



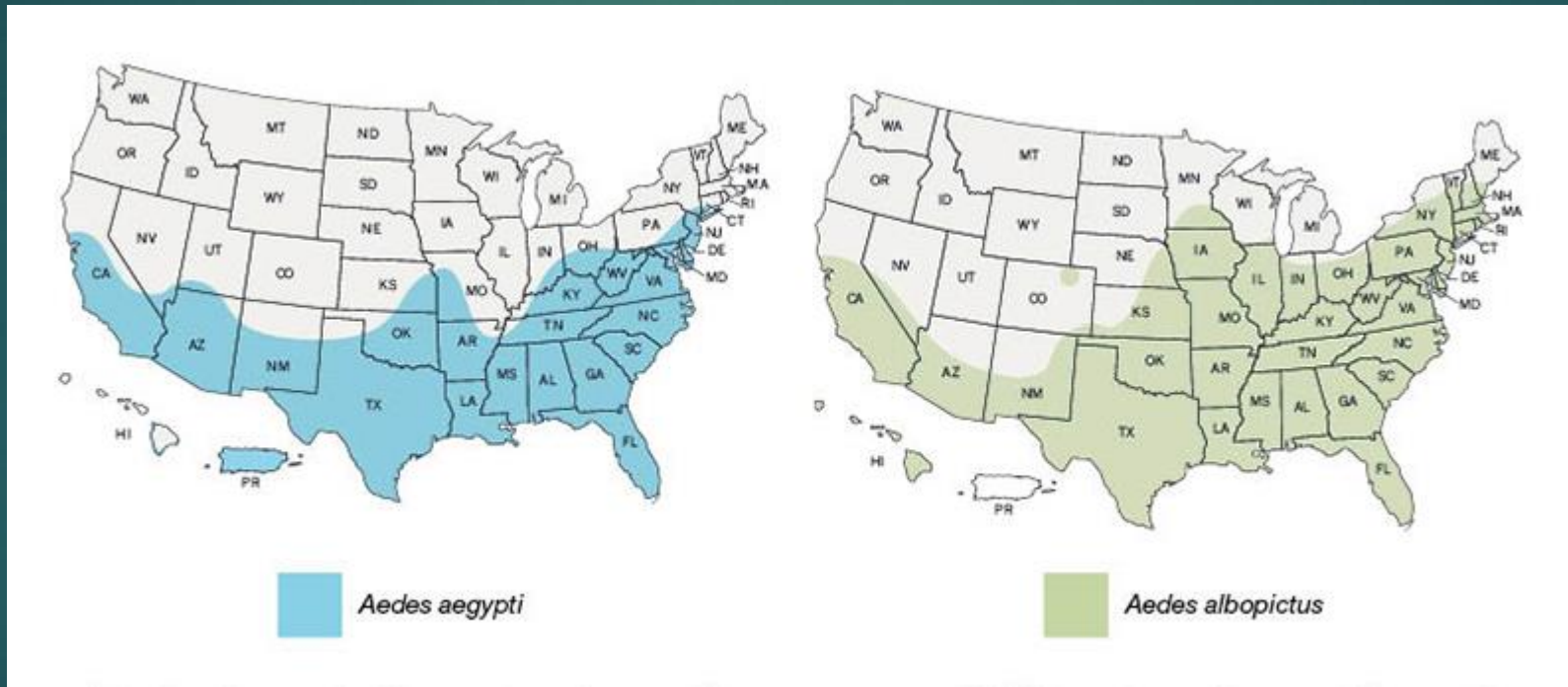
- ▶ Urban mosquito
- ▶ Container habitats
- ▶ Day biting (dusk & dawn)
- ▶ Multiple bloodmeals
- ▶ Endophilic
- ▶ Anthropophilic
- ▶ There are NO populations in NJ

Aedes albopictus

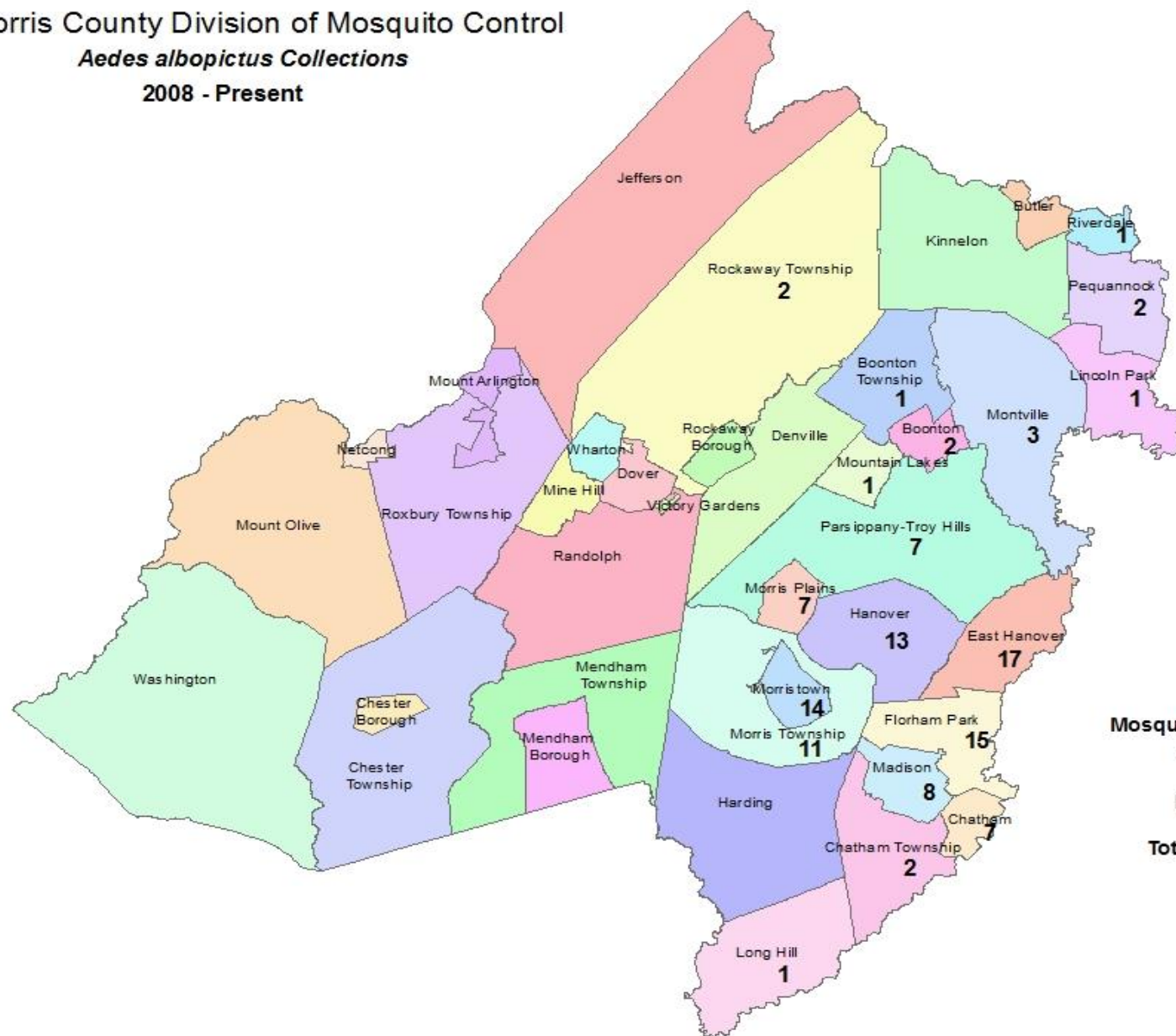


- ▶ Highly adaptive mosquito
- ▶ Natural & artificial containers
- ▶ Rural & suburban
- ▶ Opportunistic day biting (dusk & dawn)
- ▶ Outside & inside
- ▶ *Wider host range

CDC Estimated Range of *Ae. aegypti* and *Ae. albopictus*



Morris County Division of Mosquito Control
Aedes albopictus Collections
 2008 - Present



Mosquito Collection Methods
 NJ Light Traps
 Gravid Traps
 Landing Counts
Total Collection = 115

Ovillanta Trap



Public Education

ATTENTION!

A new species of mosquito is spreading throughout New Jersey and may be in your backyard. Now in Morris County and neighboring counties.



**The Asian tiger mosquito
*Aedes albopictus***

ARE YOU...

- bitten mainly in the daytime?
- bitten mostly in shaded areas of your property?
- often bitten on the feet, ankles, or lower legs?
- bitten by small (about 1/4") black mosquitoes with **bright white stripes** on the legs, back and head?

If you answered yes to most of these questions you probably have Asian tiger mosquitoes in your neighborhood.

Dump standing water to destroy mosquito habitat



Check for containers like:

- Old tires
- Buckets
- Kiddie Pools
- Toys
- Watering Cans
- Pet Dishes
- Bird Baths
- Plastic Tarps
- Flower Pots

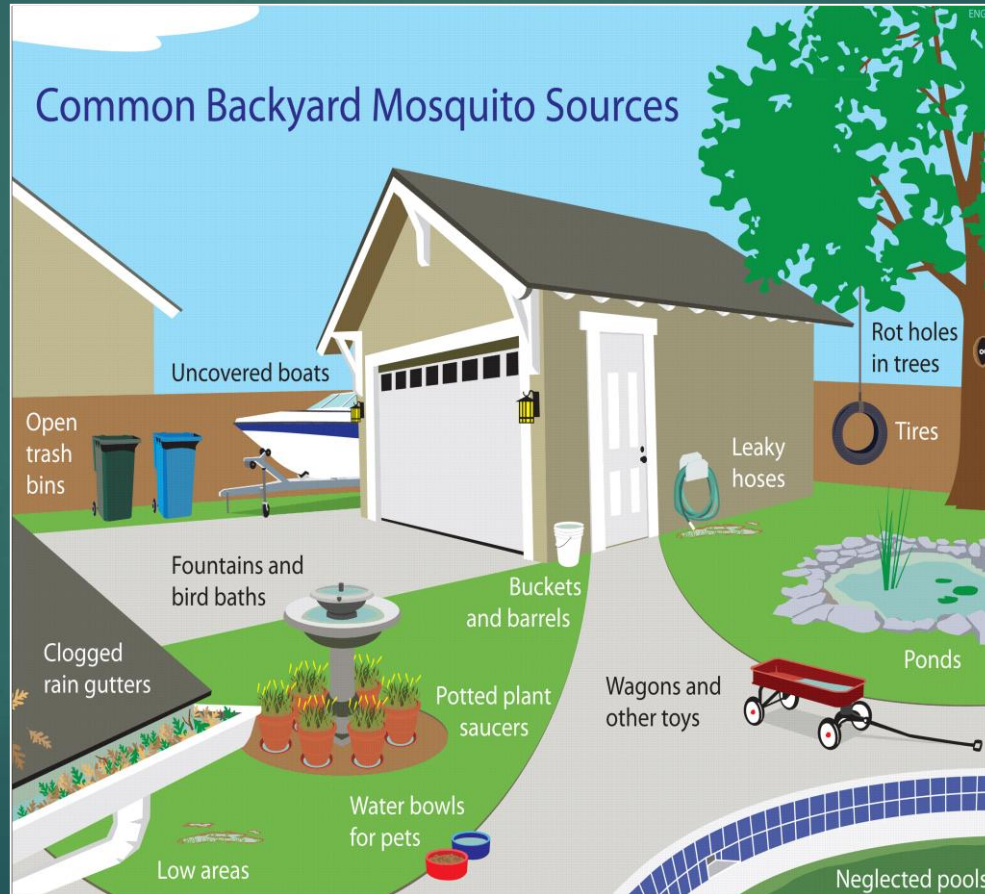



Contact Us

County of Morris, Department of Planning and Public Works
Division of Mosquito Control
PO Box 900, Morristown NJ 07963-0900
Phone 973-285-6450 Fax 973-285-6454
www.morrismosquito.org

Report mosquito problems in your neighborhood and dump standing water!

Common Backyard Mosquito Sources






Use an Environmental Protection Agency (EPA)-registered insect repellent to protect yourself and your family from Zika and other viruses spread through mosquito bites.

Look for one of the following active ingredients

Active ingredient	Some brand name examples*
DEET	Off!, Cutter, Sawyer, Ultrathon
Picaridin, also known as KBR 3023, Bayrepel, and Icaridin	Cutter Advanced, Skin So Soft Bug Guard Plus, Autan (outside the United States)
Oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD) <small>Do not use OLE or PMD on children under the age of 3.</small>	Repel
IR3535	Skin So Soft Bug Guard Plus Expedition, SkinSmart

RECENTLY IN THE AMERICAN TROPICS?

MOSQUITOES spread DENGUE, CHIKUNGUNYA, ZIKA, and other diseases



Watch for fever with, muscle, or eye pain, or a rash in the next 2 weeks.

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

If you get sick, see a doctor. Tell the doctor where you traveled.

For more information, visit www.cdc.gov/travel

CDC's Response to Zika

Stop mosquito bites. Don't stop outdoor activities.

Protect yourself from Zika
Zika is a disease primarily spread by mosquitoes, so if you're outdoors, protect yourself from bites.

Know before you go
Zika is not being spread in the continental United States at this time. As the mosquito season begins, find out areas where Zika is spreading: www.cdc.gov/zika/geo

What to take with you

- EPA-registered insect repellent. Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.
- Long-sleeved shirts and long pants.
- Clothing and gear treated with permethrin.
- A tent to sleep in (if mosquitoes can get to where you're sleeping).

Protect yourself and your family

- Use insect repellent. Reapply as directed. Remember to apply sunscreen first and then insect repellent.
- Cover exposed skin when possible.
- If you're camping or sleeping outside, use a tent.
- Dress kids in clothing that covers arms and legs.
- Cover strollers and baby carriers with mosquito netting.
- Spray repellent onto your hands to apply to a child's face. Don't use repellent on babies younger than 2 months old.
- Do not use OLE on children under 3.

STOP the spread
If you have been in an area with Zika

- Watch for symptoms. Call your doctor immediately if you get sick.
- If you've been in an area with Zika, use insect repellent for 3 weeks after travel.
- Use condoms when you have sex.


Zika symptoms
Many people with Zika don't know they have it. The illness is usually mild with symptoms lasting about a week. The most common symptoms are:



www.cdc.gov/zika

CHIKUNGUNYA, DENGUE, or ZIKA: What is local transmission?

A person who has not traveled recently gets bitten by an infected mosquito where they live, work, or play.



Protect yourself from mosquito bites. Use insect repellent.

For more information: www.cdc.gov/chikungunya • www.cdc.gov/dengue • www.cdc.gov/zika

CHIKUNGUNYA, DENGUE, or ZIKA: What is an imported case?

A person who was bitten by an infected mosquito while traveling away from home.



Symptoms may begin 3-7 days after being bitten by an infected mosquito.

For more information: www.cdc.gov/chikungunya • www.cdc.gov/dengue • www.cdc.gov/zika

Sick with chikungunya, dengue, or Zika?

Protect yourself and others from mosquito bites the first week you are sick. If a mosquito bites you, it can get infected, bite other people, and make them sick.



Protect yourself from mosquito bites

- Wear long-sleeved shirts and long pants.
- Use door and window screens to keep mosquitoes outside.
- Use insect repellent.

See your doctor if you develop a fever with:

- Muscle or joint pain
- Headache or pain behind eyes
- Rash
- Red eyes

For more information: www.cdc.gov/chikungunya • www.cdc.gov/dengue • www.cdc.gov/zika

CDC's Response to Zika

Enjoy your vacation

Protect your family from Zika!
Zika is a disease primarily spread by mosquitoes, but a man with Zika can spread it to his sex partners as well.

Know before you go
Learn about Zika at cdc.gov/zika. Find out if your destination has Zika, check the CDC Travelers' Health site for current travel notices: cdc.gov/travel

Pack to prevent


- Insect repellent (Look for these ingredients: DEET, picaridin, IR3535, OLE, or PMD.)
- Long-sleeved shirts and long pants
- Clothing and gear treated with permethrin
- Insect carrier mosquito net (if needed)
- Bed net (if mosquitoes can get to where you're sleeping)
- Condoms (if you might have sex)

Protect yourself

- Use insect repellent. Reapply as directed. Remember to apply sunscreen first and then insect repellent.
- Cover exposed skin when possible.
- Stay and sleep in screened-in or air-conditioned rooms. Use a bed net if you're sleeping outside.
- Zika can also be spread through sex, so use latex condoms if you have sex.

STOP the spread
Watch for symptoms after you get home. Call your doctor immediately if you suspect Zika. Use insect repellent for 3 weeks after travel. Use condoms when you have sex.

Zika symptoms
Most people with Zika don't know they have it. The illness is usually mild with symptoms lasting about a week. The most common symptoms are:



Pregnant? Trying to conceive?
Zika is linked to birth defects. Pregnant women should consider postponing travel to any area with Zika. If your male partner travels to these areas, either use condoms or don't have sex for the rest of your pregnancy. If you are trying to become pregnant, talk to your doctor about your plans.

www.cdc.gov/zika

Reduce the Risk of a Mosquito Bite by following the three D's

- ▶ **D**rain the water - Be sure to empty containers around your yard
- ▶ **D**ress to cover skin - Wear long sleeves and pants when outside during mosquito season
- ▶ **D**efend by use of repellants – Follow label directions and apply an EPA registered and CDC recommended mosquito repellant.

Stay Informed

- ▶ United States Center for Disease Control: www.cdc.gov/zika
- ▶ New Jersey Department of Health: <http://www.nj.gov/health>
- ▶ County Office of Health Management: www.morrishealth.org
- ▶ Morris County Division of Mosquito Control:
<http://morriscountynj.gov/mosquito/>
- ▶ Local Health Department:
<http://www.state.nj.us/health/lh/directory/lhdselectcounty.shtml>

Any Questions?



Susan Ellis, Bugwood.org

- ▶ Phone – (973)285-6450
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- ▶ Web - <http://morriscountynj.gov/mosquito/>